



SUBSTITUTE FORM PTO-1449 (MODIFIED)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		Attorney Docket No.	50010/006006	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)				Serial No.	09/431,821	
				Applicant	Douglas A. Treco <i>et al.</i>	
				Filing Date	November 2, 1999	
				Group	Not Yet Assigned	
(37 CFR §1.98(b))				IDS Filed	September 8, 2000	
U.S. PATENTS						
Examiner's Initials	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date (If Appropriate)
1 <i>ML</i>	4,396,601	2 Aug 1983	Salser <i>et al.</i>			
2	4,497,796	2 May 1985	Salser <i>et al.</i>			
3	4,703,008	27 Oct 1987	Lin			
4	4,789,550	12 Jun 1988	Hommel <i>et al.</i>			
5	4,892,538	1 Sep 1990	Aebischer <i>et al.</i>			
6	4,980,286	25 Dec 1990	Morgan <i>et al.</i>			
7	5,082,670	21 Jan 1992	Gage <i>et al.</i>			
8	5,089,397	18 Feb 1992	Kushner <i>et al.</i>			
9	5,166,059	24 Nov 1992	Pastan <i>et al.</i>			
10	5,175,255	29 Dec 1992	Thomason <i>et al.</i>			
FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION						
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11 <i>ML</i>	WO 87/00201	15 Jan 1987	PCT			
12	WO 88/00239	14 Jan 1988	PCT			
13	WO 88/08306	03 Mar 1988	PCT			
14	WO 89/01517	23 Feb 1989	PCT			
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## U.S. PATENTS

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15 <i>ML</i>	5,194,596	14 Dec 1989	Tischer <i>et al.</i>			
16	5,219,740	15 Jun 1993	Miller <i>et al.</i>			
17	5,272,071	21 Dec 1993	Chappel			
18	5,399,346	21 Mar 1995	Anderson <i>et al.</i>			
19	5,460,959	24 Oct 1995	Mulligan <i>et al.</i>			
20	5,464,764	7 Nov 1995	Capecchi <i>et al.</i>			
21	5,578,461	26 Nov 1996	Sherwin <i>et al.</i>			
22	5,789,215	4 Aug 1998	Berns <i>et al.</i>			

## FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

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23 <i>ML</i>	WO 89/05345	11 Dec 1987	PCT			
24	WO 89/07136	05 Feb 1988	PCT			
25	WO 90/06757	28 Jun 1990	PCT			
26	WO 90/06997	13 Dec 1988	PCT			
27	WO 90/11354	04 Oct 1990	PCT			
28	WO 90/12878	22 May 1989	PCT			
29	WO 90/15863	13 Jun 1989	PCT			
30	WO 91/06666	16 May 1991	PCT			

## OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)

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31	WO 91/06667	16 May 1991	PCT			
32	WO 91/09955	11 Jul 1991	PCT			
33	WO 91/13151	05 Sep 1991	PCT			
34	WO 91/19796	26 Dec 1991	PCT			
35	WO 92/03917	19 Mar 1992	PCT			
36	WO 92/07573	31 Oct 1990	PCT			
37	WO 92/08796	29 Mar 1992	PCT			
38	WO 92/12242	26 Dec 1990	PCT			
39	WO 92/15676	08 Mar 1991	PCT			
40	WO 92/19255	12 Nov 1992	PCT			
41	WO 92/20808	26 Nov 1992	PCT			
42	WO 93/04169	04 Mar 1993	PCT			
43	EP 0038765	22 Mar 1981	Europe			
44	EP 0236059	09 Sep 1987	Europe			
45	EP 0255231	03 Feb 1988	Europe			
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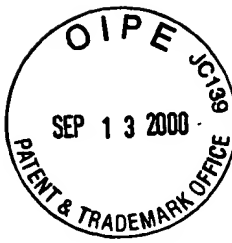
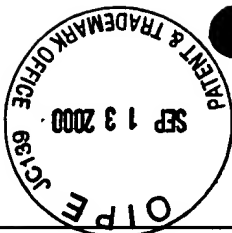
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46	EP 0289034	02 Nov 1988	Europe			
47	EP 0452894	23 Oct 1991	Europe			
48	<del>EP Opposition</del> (NO NUMBER)	<del>30 Apr 98</del>	<del>On behalf of Genetic Therapy, Inc.</del>			
49	<del>EP Opposition</del> (NO NUMBER)	<del>30 Apr 98</del>	<del>On behalf of Institut Pasteur</del>			
50	<del>EP Opposition</del> (NO NUMBER)	<del>04 May 98</del>	<del>On behalf of Boehringer Mannheim GMBH</del>			
51	<del>EP Opposition</del> (NO NUMBER)	<del>04 May 98</del>	<del>On behalf of Applied Research Systems</del>			
52	<del>EP Opposition</del> (NO NUMBER)	<del>04 May 98</del>	<del>On behalf of Cell Genesys, Inc.</del>			
53	2159172	27 Nov 1985	Great Britain			
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54	MM	Alberts, Molecular Biology of the Cell (Glossary), third edition, Garland Publishing, Inc., New York.				
55		Antin <i>et al.</i> , "Single Cell Analysis of Transfected Gene Expression in Primary Heart Cultures Containing Multiple Cell Types," BioTechniques 6:640-648, 1988.				
56		Barr <i>et al.</i> , "Systemic Delivery of Recombinant Proteins by Genetically Modified Myoblasts," Science, 254:1507-1509, 1991.				
57		Behr <i>et al.</i> , "Efficient Gene Transfer Into Mammalian Primary Endocrine Cells with Lipopolyamine-coated DNA," Proceedings of the National Academy of Sciences U.S.A. 86:6982-6986, 1989.				
58		Bennett <i>et al.</i> , "A Role for Cyclosporin A in Gene Replacement Therapy," American Journal of Human Genetics 45:A109, 1989.				
59		Bennett <i>et al.</i> , "Suppression of Immunological Response Against a Novel Gene Product Delivered by Implants of Genetically Modified Fibroblasts," Molecular Biology and Medicine, 7:471-477, 1990.				
60	I	Boggs, "Targeted Gene Modification for Gene Therapy of Stem Cells," International Journal of Cell Cloning 8:80-96, 1990.				
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61		Brash <i>et al.</i> , "Strontium Phosphate Transfection of Human Cells in Primary Culture: Stable Expression of the Simian Virus 40 Large-T-Antigen Gene in Primary Human Bronchial Epithelial Cells," <i>Molecular and Cellular Biology</i> 7(5):2031-2034, 1987.				
62		Brenner <i>et al.</i> , "Expression of Collagen Genes in the Liver," <i>Molecular Biology and Medicine</i> 7:105-115, 1990.				
63		Brigham <i>et al.</i> , "Expression of a Prokaryotic Gene in Cultured Lung Endothelial Cells after Lipofection with a Plasmid Vector," <i>Am. Journal of Respiratory Cell. and Molecular Biology</i> 1:95-100, 1989.				
64		Burrin <i>et al.</i> , "Regulation of Transfected Glycoprotein Hormone $\alpha$ -Gene Expression in Primary Pituitary Cell Cultures," <i>Molecular Endocrinology</i> 3(10):1643-1651, 1989.				
65		Camerini-Otero, "Right on Target," <i>The New Biologist</i> 2:337-341, 1990.				
66		Cann <i>et al.</i> , "High Efficiency Transfection of Primary Human Lymphocytes and Studies of Gene Expression," <i>Oncogene</i> 3:123-128, 1988.				
67		Capecchi, "High Efficiency Transformation By Direct Microinjection of DNA Into Cultured Mammalian Cells," <i>Cell</i> 22:479-488, 1980.				
EXAMINER			DATE CONSIDERED			
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68	<i>ML</i>		Capecchi, "The New Mouse Genetics: Altering the Genome by Gene Targeting," Trends in Genetics 5:70-76, 1989.			
69			Capecchi, "Altering the Genome by Homologous Recombination," Science 244:1288-1292, 1989.			
70			Chang <i>et al.</i> , "High Efficiency Gene Transfection by Electroporation Using a Radio-Frequency Electric Field," Biochimica et Biophysica Acta, 1092:153-160, 1991.			
71			Chang <i>et al.</i> , "Autologous Fibroblast Implantation Feasibility and Potential Problems in Gene Replacement Therapy," Molecular Biology and Medicine, 7:461-470, 1990.			
72			Cline, "Perspectives for Gene Therapy: Inserting New Genetic Information into Mammalian Cells by Physical Techniques and Viral Vectors," Pharmacology and Therapy 29:69-92, 1985.			
73			Corey <i>et al.</i> , "Erythropoiesis in Murine Long-Term Marrow Cultures Following Transfer of the Erythropoietin cDNA into Marrow Stromal Cells," Experimental Hematology, 18(3):201-204, 1990.			
74			Crystal, "Transfer of Genes to Humans: Early Lessons and Obstacles to Success," Science 270:404-410, 1995.			
75			Daubas <i>et al.</i> , "Functional Activity of the Two Promoters of the Myosin Alkali Light Chain Gene in Primary Muscle Cell Cultures: Comparison with Other Muscle Gene Promoters and Other Culture Systems," Nucleic Acids Research 16(4):1251-1271, 1988.			
76			Dhawan <i>et al.</i> , "Systemic Delivery of Human Growth Hormone by Injection of Genetically Engineered Myoblasts," Science 254:1509-1512, 1991.			
EXAMINER <i>V. KETTER ML</i>			DATE CONSIDERED <i>3/24/01</i>			
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77		Diatloff-Zito <i>et al.</i> , "Abnormal Response to DNA Crosslinking Agents of Fanconi Anemia Fibroblasts can be Corrected by Transfection with Normal Human DNA," Proceedings of the National Academy of Sciences U.S.A. 83:7034-7038, 1986.					
78		Doering <i>et al.</i> , "Expression of a Novel Gene Product by Transplants of Genetically Modified Primary Fibroblasts in the Central Nervous Systems," Journal of Neuroscience Research 29:292-298, 1991.					
79		Doetschman <i>et al.</i> , "Targeted Correction of a Mutant HPRT Gene in Mouse Embryonic Stem Cells," Nature, 330:576-578, 1987.					
80		Doetschman <i>et al.</i> , "Targeted Mutation of the HPRT Gene in Mouse Embryonic Stem Cells," Proceedings of the National Academy of Sciences U.S.A. 85:8583-8587, 1988.					
81		Drucker, <i>et al.</i> , "Cell-Specific Post-Translational Processing of Preproglucagon Expressed from a Metallothionein-Glucagon Fusion Gene," The Journal of Biological Chemistry 261(21):9637-9643, 1986.					
82		Duncan <i>et al.</i> , Biochemistry (Moscow) 62:1263-1274, 1997.					
83		Finn <i>et al.</i> , "Homologous Plasmid Recombination is Elevated in Immortally Transformed Cells," Molecular and Cellular Biology, 9:4009-4017, 1989.					
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84	<i>MM</i>	Fishel <i>et al.</i> , "Biochemical Studies of Homologous and Nonhomologous Recombination in Human Cells," <i>Biochimie</i> , 73:257-267, 1991.				
85		Fountain <i>et al.</i> , "Transfection of Primary Human Skin Fibroblasts by Electroporation," <i>Gene</i> 68(1):167-172, 1988.				
86		Friedmann, "Progress Toward Human Gene Therapy," <i>Science</i> 244:1275-1281, 1989.				
87		Frohman, "Cut, Paste, and Save: New Approaches to Altering Specific Gene in Mice," <i>Cell</i> 56:145-147, 1989.				
88		Gao <i>et al.</i> , "A Novel Cationic Liposome Reagent for Efficient Transfection of Mammalian Cells," <i>Biochemical and Biophysical Research Communications</i> 179(1):280-285, 1995.				
89		Gareis <i>et al.</i> , "Homologous Recombination of Exogenous DNA Fragments with Genomic DNA in Somatic Cells of Mice," <i>Cellular and Molecular Biology</i> 37(2):191-203, 1991.				
90		Ginot <i>et al.</i> , "Transfection of Hepatic Genes Into Adult Rat Hepatocytes in Primary Culture and Their Tissue-Specific Expression," <i>European Journal of Biochemistry</i> 180:289-294, 1989.				
91		Glover, "Expression of Cloned Genes in Animal Cells," In "Gene Cloning, The Mechanics of DNA Manipulation," pp. 179-202, Chapman and Hall, New York, 1984.				
92		Hammer <i>et al.</i> , "Partial Correction of Murine Hereditary Growth Disorder by Germ-Line Incorporation of a New Gene," <i>Nature</i> 311:65-67, 1984.				
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93	MA	Harper <i>et al.</i> , "Expression of Transfected DNA by Primary Murine Keratinocytes," Journal of Investigative Dermatology 91(2):150-153, 1988.					
94	I	Heartlein <i>et al.</i> , "Long-Term Production and Delivery of Human Growth Hormone," Proceedings of the National Academy of Sciences U.S.A. 91:10967-10971, 1994.					
95	I	Hesse <i>et al.</i> , "Regulated Gene Expression in Transfected Primary Chicken Erythrocytes," Proceedings of the National Academy of Sciences U.S.A. 83:4312-4316, 1986.					
96	I	Iannuzzi <i>et al.</i> , "The Introduction of Biologically Active Foreign Genes into Human Respiratory Epithelial Cells Using Electroporation," Am. Rev. of Resp. Dis. 138:965-968, 1988.					
97	I	Imagawa <i>et al.</i> , "Regulatory Elements of the Erythropoietin Gene," Blood 77(2):278-285, 1991.					
98	I	Itzhaki <i>et al.</i> , "Targeted Disruption of a Human Interferon-Inducible Gene Detected by Secretion of Human Growth Hormone," Nucleic Acids Research 19(4):3835-3842, 1991.					
99	I	Jensen <i>et al.</i> , "High-Frequency Transfection of Cultured Human Epidermal Basal Cells That Differentiate to Form a Multilayered Tissue," Experimental Cell Research 189:163-168, 1990.					
100	I	Joyner <i>et al.</i> , "Production of a mutation in mouse En-2 gene by homologous recombination in embryonic stem cells," Nature 338:153-155, 1989.					
101	I	Kaufman <i>et al.</i> , "Strategies for Obtaining High Level Expression in Mammalian Cells," Technique 2:221-236, 1990.					
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102	AK	Keating <i>et al.</i> , "Gene Transfer by Electroporation: A Model for Gene Therapy," Progress in Clinical Biological Research 333:491-498, 1990.				
103		Keating <i>et al.</i> , "Effect of Different Promoters on Expression of Genes Introduced Into Hematopoietic and Marrow Stromal Cells by Electroporation," Experimental Hematology 18:99-102, 1990.				
104		Kendrew, The Encyclopedia of Molecular Biology, Blackwell Science Ltd., Oxford, p. 1085, 1994.				
105		Kramerova <i>et al.</i> , "Expression of the Cloned Human Erythropoietin Gene in CHO Cells," Biopolim Kletka 5(2):47-51, 1989.				
106		Kremer <i>et al.</i> , "Regulation of Parathyroid Hormone-like Peptide in Cultured Normal Human Keratinocytes," The Journal of Clinical Investigation 87:884-893, 1991.				
107		Kreymann <i>et al.</i> , "Glucagon-Like Peptide-1 7-36: A Physiological Incretin In Man," The Lancet 2:1300-1304, 1987.				
108		Kriegler, "Gene Transfer and Expression: A Laboratory Manual," Stockton Press, New York, 1990.				
109		Le Mouellic <i>et al.</i> , "Targeted Replacement of the Homeobox Gene <i>Hox-3.1</i> by the <i>Escherichia coli lacZ</i> in Mouse Chimeric Embryos," Proceedings of the National Academy of Sciences U.S.A. 87:4712-4716, 1990.				
110		Ledley, "Clinical Considerations in the Design of Protocols for Somatic Gene Therapy," Human Gene Therapy 2:77-83, 1991.				
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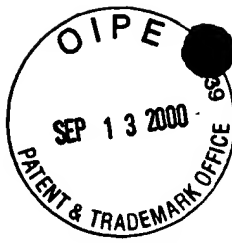
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U.S. PATENTS						
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Examiner's Initials	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation (Yes/No)
OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)						
110	AK	Lee <i>et al.</i> , "Glucagon Gene 3'-Flanking Sequences Direct Formation of Proglucagon Messenger RNA 3'-Ends in Islet and Nonislet Cells Lines," <i>Molecular Endocrinology</i> , 4(6):800-806, 1990.				
111		Lewin, <i>Genes IV</i> , Oxford University Press, Oxford, p. 820, 1990.				
112		Litwer <i>et al.</i> , "Reversion of the Maple Syrup Urine Disease Phenotype of Impaired Branched Chain Alpha-Ketoacid Dehydrogenase Complex Activity in Fibroblasts from an Affected Child," <i>The Journal of Biological Chemistry</i> 264:14597-14600, 1989.				
113		Loeffler <i>et al.</i> , "Lipopolyamine-Mediated Transfection Allows Gene Expression Studies in Primary Neuronal Cells," <i>Journal of Neurochemistry</i> 54:1812-1815, 1990.				
114		Lu <i>et al.</i> , "Gene Transfer by Lipofection in Rabbit and Human Secretory Epithelial Cells," <i>Pflügers Archives</i> 415:198-203, 1989.				
115		Lupton <i>et al.</i> , "Dominant Positive and Negative Selection Using A Hygromycin Phosphotransferase-Thymidine Kinase Fusion Gene," <i>Molecular and Cellular Biology</i> 11(6):3374-3378, 1991.				
116		Mansour, "Gene Targeting in Murine Embryonic Stem Cells: Introduction of Specific Alterations into the Mammalian Genome," <i>Genet. Anal. Tech Appl.</i> 7:219-227, 1990.				
117		Mansour <i>et al.</i> , "Disruption of the Proto-Oncogene int-2 in Mouse Embryo-Derived Stem Cells: A General Strategy for Targeting Mutations to Non-Selectable Genes," <i>Nature</i> 336:348-352, 1988.				
118		Marshall, "Gene Therapy's Growing Pains," <i>Science</i> 269:1050-1055, 1995.				
EXAMINER J. KETTER			DATE CONSIDERED 3/24/01			
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with the next communication to applicant.						



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119	AK	Mercola <i>et al.</i> , "Insertion of New Genetic Information into Bone Marrow Cells of Mice: Comparison of Two Selectable Genes," Annals New York Academy of Sciences, p. 272-280, 1982.				
120		Mes-Masson <i>et al.</i> , "Expression of Oncomodulin Does Not Lead to the Transformation or Immortalization of Mammalian Cells <i>In Vitro</i> ," Journal of Cellular Science, 94:517-25, 1989.				
121		Morgan <i>et al.</i> , "Expression of an Exogenous Growth Hormone Gene by Transplantable Human Epidermal Cells," Science 237:1476-1479, 1987.				
122		Morgenstern <i>et al.</i> , "Advanced Mammalian Gene Transfer: High Titre Retroviral Vectors With Multiple Drug Selection Markers and a Complementary Helper-Free Packaging Cell Line," Nucleic Acids Research 18(12):3587-3596, 1990.				
123		Narayanan <i>et al.</i> , "In Vivo Expression of a Nonselected Gene Transferred into Murine Hematopoietic Stem Cells by Electroporation," Biochemical and Biophysical Research Communications 141:1018-1024, 1986.				
124		Ogura <i>et al.</i> , "Implantation of Genetically Manipulated Fibroblasts into Mice as Antitumor $\alpha$ -Interferon Therapy," Cancer Research 50:5102-5106, 1990.				
125		Orkin <i>et al.</i> , "Report and Recommendations of the Panel to Assess the NIH Investment in Research on Gene Therapy," 1995.				
126		Palmer <i>et al.</i> , "Genetically Modified Skin Fibroblasts Persist Long After Transplantation But Gradually Inactivate Introduced Genes," Proceedings of the National Academy of Sciences U.S.A. 88:1330-1334, 1991.				
EXAMINER J. HETTER AK			DATE CONSIDERED 3/24/01			
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127		Palmiter <i>et al.</i> , "Metallothionein-Human GH Fusion Genes Stimulate Growth of Mice," Science 222:809-814, 1983.				
128		Pasco <i>et al.</i> , "Laboratory Methods, Efficient DNA-Mediated Gene Transfer into Primary Cultures of Adult Rat Hepatocytes," DNA 8(7):535-541, 1989.				
129		Ponder <i>et al.</i> , "Evaluation of Relative Promoter Strength in Primary Hepatocytes Using Optimized Lipofection," Human Gene Therapy 2:41-52, 1991.				
130		Ponticelli <i>et al.</i> , "Correction of Anaemia with Recombinant Human Erythropoietin," Nephron 52:201-208, 1989.				
131		Potter, "Electroporation in Biology: Methods, Applications, and Instrumentation," Analytical Biochemistry 174:361-73, 1988.				
132		Powell, "Human Erythropoietin Gene: High Level Expression In Stably Transfected Mammalian Cells and Chromosome Localization," Proceedings of the National Academy of Sciences U.S.A. 83:6465-6469, 1986.				
133		Rippe <i>et al.</i> , "DNA-Mediated Gene Transfer Into Adult Rat Hepatocytes in Primary Culture," Molecular and Cellular Biology 10(2):689-695, 1990.				
134		Robertson, "Using Embryonic Stem Cells to Introduce Mutations into the Mouse Germ Line," Biology of Reproduction 44:238-245, 1991.				
135		Rodriguez <i>et al.</i> , "Recombinant DNA Techniques: An Introduction," The Benjamin/Cummings Publishing Company, Inc., London, 1983.				
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OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)						
136	MS	Rosenfeld <i>et al.</i> , "In Vivo Transfer of the Human Cystic Fibrosis Transmembrane Conductance Regulator Gene to the Airway Epithelium," Cell 68:143-155, 1992.				
137		Sambrook <i>et al.</i> , "Molecular Cloning," Cold Spring Harbor Laboratory Press, Cold Spring Harbor, New York, p. 16.3-16.4, 1989.				
138		Sandhu <i>et al.</i> , "Human Gene Therapy," Critical Reviews in Biotechnology 17:307-326, 1997.				
139		Scharfmann <i>et al.</i> , "Long-Term <i>In Vivo</i> Expression of Retrovirus-Mediated Gene Transfer in Mouse Fibroblast Implants," Proceedings of the National Academy of Sciences U.S.A. 88:4626-4630, 1991.				
140		Sedivy <i>et al.</i> , "Positive Genetic Selection for Gene Disruption in Mammalian Cells by Homologous Recombination," Proceedings of the National Academy of Sciences U.S.A. 86:227-231, 1989.				
141		Selden <i>et al.</i> , "Regulation of Insulin-Gene Expression," The New England Journal of Medicine 317:1067-1076, 1987.				
142		Selden <i>et al.</i> , "Implantation of Genetically Engineered Fibroblasts into Mice: Implications for Gene Therapy," Science 236:714-718, 1987.				
143		Shesely <i>et al.</i> , "Correction of a Human $\beta^s$ -globin Gene by Gene Targeting," Proceedings of the National Academy of Sciences U.S.A. 88:4294-4298, 1991.				
144		Sittler <i>et al.</i> , "Tissue-Specific Expression of the Rat Growth Hormone Gene is Due to the Interaction of Multiple Promoter, Not Enhancer, Elements," DNA and Cell Biology 9(7):511-518, 1990.				
EXAMINER J. KETTER			DATE CONSIDERED 3/24/01			
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OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)						
145	<i>AK</i>	Smith, "Regulation of Hematopoiesis," The Yale Journal of Biology and Medicine, 63(5):371-80, 1990.				
146		Spandidos, "Electric Field-Mediated Gene Transfer (Electroporation) into Mouse Friend and Human K562 Erythroleukemic Cells," Gene Anal. Tech., 4:50-56, 1987.				
147		Stacey <i>et al.</i> , "Electroporation and DNA-Dependent Cell Death in Murine Macrophages," Immunology and Cell Biology 71:75-85, 1993.				
148		St. Louis <i>et al.</i> , "An Alternative Approach to Somatic Cell Gene Therapy," Proceedings of the National Academy of Sciences U.S.A., 85:3150-3154, 1988.				
149		Tatsuka <i>et al.</i> , "An Improved Method of Electroporation for Introducing Biologically Active Foreign Genes Into Cultured Mammalian Cells," Experimental Cell Research 178:154-162, 1988.				
150		Thomas <i>et al.</i> , "Site-Directed Mutagenesis by Gene Targeting in Mouse Embryo-Derived Stem Cells," Cell 51:503-512, 1987.				
151		Thomas <i>et al.</i> , "Targeted Disruption of the Murine int-1 Proto-oncogene Resulting in Severe Abnormalities in Midbrain and Cerebellar Development," Nature 346:847-850, 1990.				
152		Thompson <i>et al.</i> , "Germ Line Transmission and Expression of a Corrected HPRT Gene Produced by Gene Targeting in Embryonic Stem Cells," Cell 56:313-321, 1989.				
153		Toneguzzo <i>et al.</i> , "Stable Expression of Selectable Genes Introduced into Human Hematopoietic Stem Cells by Electric Field-Mediated DNA Transfer," Proceedings of the National Academy of Sciences U.S.A. 83:3496-3499, 1986.				
EXAMINER <i>J. KETTER</i>			DATE CONSIDERED <i>3/24/01</i>			
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OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)						
154	ML	Treco <i>et al.</i> , "Non-Viral Gene Therapy," Molecular Medicine Today 1:314-321, 1995.				
155		Treco <i>et al.</i> , "Fibroblast Cell Biology and Gene Therapy," Somatic Gene Therapy, ISBN 0-8493-2440-8:49-60, 1995.				
156		Tur-Kaspa <i>et al.</i> , "Use of Electroporation to Introduce Biologically Active Foreign Genes Into Primary Rat Hepatocytes," Molecular and Cellular Biology 6:716-718, 1986.				
157		Vega, "Prospects for Homologous Recombination in Human Gene Therapy," Human Genetics 87:245-253, 1991.				
158		Verma, "Gene Therapy," Scientific American, 68-84, November, 1990.				
159		Vogelstein <i>et al.</i> , "The Multistep Nature of Cancer," Trends in Genetics 9(4):138-141, 1993.				
160		Weatherall, "Scope and Limitations of Gene Therapy," British Medical Bulletin 51:1-11, 1995.				
161		Weidle <i>et al.</i> , "A New Expression System for Mammalian Cells Based on Putative Replicator Sequences of the Mouse and a Truncated Thymidine Kinase Gene," Gene 73:427-437, 1988.				
162		Werner <i>et al.</i> , "Expression of Transfected Genes by Differentiated, Postmitotic Neurons and Photoreceptors in Primary Cell Cultures," The Journal of Neuroscience Research 25:50-57, 1990.				
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OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PLACE OF PUBLICATION)						
163	PAK	Wolff <i>et al.</i> , "Direct Gene Transfer Into Mouse Muscle <i>In Vivo</i> ," Science 247:1465-1468, 1990.				
164		Wu, "Receptor-Mediated Gene Delivery <i>In Vivo</i> ," The Journal of Biological Chemistry 266(22):14338-14342, 1991.				
165		Yang <i>et al.</i> , " <i>In Vivo</i> and <i>In Vitro</i> Gene Transfer to Mammalian Somatic Cells by Particle Bombardment," Proceedings of the National Academy of Sciences U.S.A. 87:9568-9572, 1990.				
166		Zheng <i>et al.</i> , "Primary cells and established cell lines join DNA ends with the same efficiency relative to homologous recombination," Plasmid 22:99-105, 1989.				
167	I	Zheng <i>et al.</i> , "Fidelity of Targeted Recombination in Human Fibroblasts and Murine Embryonic Stem Cells," Proceedings of the National Academy of Sciences 88:8067-8071, 1991.				
EXAMINER J. KETTER			DATE CONSIDERED 3/24/01			
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